ANNUAL INSPECTION REPORT METAL CLEANING BASIN POWERTON STATION OCTOBER 2021

This initial annual inspection report has been prepared pursuant to the coal combustion residuals (CCR) rule codified in Title 35 of the Illinois Administrative Code, Section 845.540(b) effective as of April 21, 2021 for the Metal Cleaning Basin (MCB or Basin) at Powerton Station in Pekin, Illinois (Station). The purpose of this project is to perform the annual inspection of the MCB by a licensed professional engineer to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards. Civil & Environmental Consultants, Inc. (CEC) completed the following scope of services in preparing this annual inspection report:

- CEC reviewed the weekly and monthly inspection reports provided by station personnel. Since this is an initial inspection, no previous annual inspection report has been completed.
- CEC performed the annual inspection in accordance with the requirements of Part 845.540 including observations pertaining to the following:
 - <u>Changes in Geometry</u>: Observations of changes in the geometry of the MCB.
 - <u>Instrumentation</u>: Inspection of the location and type of existing instrumentation and documentation of the maximum recorded readings of each instrument from records provided by Station personnel.
 - Capacity and Impounded Volume: Approximate minimum, maximum, and present depth and elevation of the impounded water and CCR; storage capacity of the impounding structure at the time of the inspection; and the approximate volume of the impounded water and CCR at the time of the inspection.
 - Structural/Operational Observations: Inspection for actual or potential structural weakness of the CCR surface impoundment, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR surface impoundment and appurtenant structures.
 - Other Changes: Inspection including change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection.

The MCB is an active surface impoundment less than two acres in size. On October 13, 2021, CEC inspected the MCB and our observations showed no signs of distress that would suggest the stability or operation of the impounding structure is compromised.

1.0 CHANGES IN GEOMETRY

Since this is an initial annual inspection, changes in geometry compared to previous inspections could not be assessed. However, at the time of inspection, the MCB geometry was observed to be unchanged from previous online aerial photographs.

2.0 INSTRUMENTATION

Based on our interview of Station personnel which was confirmed through our inspection, the MCB has no instrumentation.

3.0 CAPACITY AND IMPOUNDED VOLUME

Capacity and impounded volume of the MCB and estimated depth of impounded water and CCR are represented in Table 1, attached. Volumes and depths were determined through discussion with station personnel and by reviewing inspection reports, construction drawings, and from modeling using existing topographic data.

4.0 STRUCTURAL/OPERATIONAL OBSERVATIONS

The MCB was inspected for signs of distress that would have the potential to disrupt operation and safety of the basin. Prior to performing the initial inspection, discussion with statement personnel did not identify conditions that indicate an actual or potential structural weakness. Weekly and monthly inspection reports were also reviewed and did not indicate an actual or potential structural weakness.

5.0 OTHER CHANGES

The MCB was inspected for signs of other changes or distress that would have the potential to disrupt operation and safety of each basin. Our inspection showed no distresses that would affect the operation and/or stability of the MCB.

6.0 LIMITATIONS AND CERTIFICATION

This initial CCR Annual Inspection Report was prepared to meet the requirements of Section 845.540(b) and was prepared under the direction of Mr. M. Dean Jones, P.E.

By affixing my seal to this, I do hereby certify to the best of my knowledge, information, and belief that the information contained in this report is true and correct. I further certify I am licensed to practice in the State of Illinois and that it is within my professional expertise to verify the

correctness of the information. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.



Name: M. Dean Jones, P.E.

Date of Certification: October 13, 2021

Illinois Professional Engineer No.: <u>062-051317</u>

Expiration Date: November 30, 2021

Table 1: Inspection Summary - Metal Cleaning Basin

Category	Regulation Reference	Evaluation	Recommended Action
Change in Geometry	§845(b)(2)(A)	None	None
Instrumentation	§845(b)(2)(B)	None	None
Water Depth	§845(b)(2)(C)	Less than 1 foot	None
CCR Depth	§845(b)(2)(C)	Less than 1 foot	None
Estimated Storage Capacity	§845(b)(2)(D)	17 Acre Feet	None
Impounded Water Volume	§845(b)(2)(E)	1.8 Acre Feet	None
Impounded CCR Volume	§845(b)(2)(E)	0.3 Acre Feet	None
Structural/Operational Observations	§845(b)(2)(F)	None	None
Other Changes	§845(b)(2)(G)	None	None